

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015774**Date Inspected:** 20-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Le Zhi Jiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 19

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 06235 to perform Magnetic particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic particle Test report for this date. The member is identified as Suspender Bracket. The weld tested is identified as follows:

(SB019-076-002,003,027,028,029,030,063,064,059,057,058)

(SB020-080-002,003,027,028,029,030,063,064,059,057,058)

(SB020-082-002,003,027,028,029,030,063,064,059,057,058)

This QA Inspector randomly observed the following work in progress:

OBG # CROSS BEAM CB11

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

OBG # CROSS BEAM CB12

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB13

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB14

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB15

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB16

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG # CROSS BEAM CB17

This QA observed ZPMC qualified welding personnel identified as 500479 perform Flux cored Arc Welding (FCAW) Process on Weld joint CB3001A-017-005. ZPMC Quality Control Personnel (QC) identified as Mr. Feng Ya Jun was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-TC-U4b-F

During the Caltrans Quality Assurance in-process observations of the fabrication of Cross beam CB17, this Quality Assurance Inspector (QA) discovered the following issue. Fracture Critical Weld (FCW) tack welds that do not appear to comply with the contract documents. These tack welds are located at the fillet weld T joints joining the Floor beam diaphragms identified as FB3058 to the SPCM area of the Intermediate web panel identified as FB3035A and to the SPCM bottom panels identified as BP3012A, BP3013A and BP3014A. The length of these tack welds measured 20mm to 60mm in length. This condition exists in the following locations: 15 locations on FB3058-056, 10 locations on FB3058-055, 6 locations on FB3058-054, 11 locations on FB3058-053. This QA notified ZPMC QC identified as Mr. Feng Ya Jun of this issue and that an incident report would be generated. See attached picture.

OBG # CROSS BEAM CB18

WELDING INSPECTION REPORT

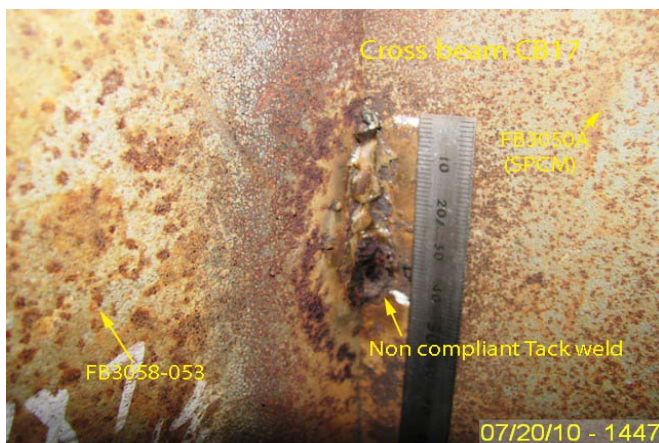
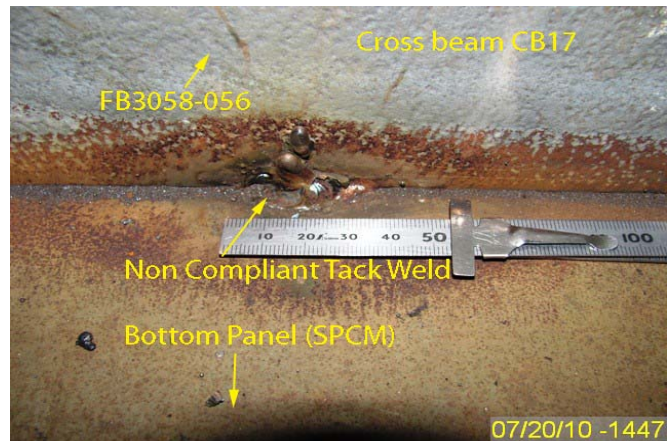
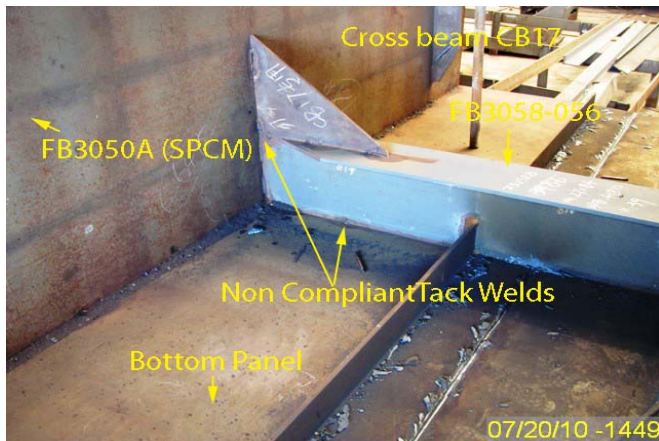
(Continued Page 3 of 4)

This QA observed ZPMC qualified welding personnel identified as 217185 perform Flux cored Arc Welding (FCAW) Process on Weld joint BP3054-001-019,020. ZPMC Quality Control Personnel (QC) identified as Mr. Cui Jun Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as 204342 perform Flux cored Arc Welding (FCAW) Process on Weld joint BP3054-001-015,016. ZPMC Quality Control Personnel (QC) identified as Mr. Cui Jun Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as 062447 perform Flux cored Arc Welding (FCAW) Process on Weld joint BP3054-001-011,012. ZPMC Quality Control Personnel (QC) identified as Mr. Cui Jun Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

As mention above

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

Inspected By:	Sukanthan,Dhanasingh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
